Valley and near-by areas on the 15th and 16th. Elsewhere the individual falls were mainly light except for local areas in the western mountain districts, where some heavy falls were recorded. Drifting snow delayed traffic somewhat in portions of New York and near-by areas about the middle of the month, and there was considerable drifting during the month in the northern Plains.

Injurious glaze storms occurred locally in Missouri and in the vicinity of the Ohio River in Illinois and Kentucky, near the first of the last decade, causing important damage to overhead wire systems, orchards, etc.

## HUMIDITY

The relative humidity was mainly less than the normal, particularly over the Southeastern States where precipitation was very deficient, and there was mainly less than normal humidity in the Northwest and far West. In portions of the middle Plains and northeastward over the Ohio Valley to New England, there was an excess in the humidity percentages, and similar conditions prevailed in the western upper Lake region and over the upper Mississippi Valley and portions of the Dakotas.

## SEVERE LOCAL HAIL AND WIND STORMS, JANUARY, 1927

[The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A more complete statement will appear in the Annual Report of the Chief of Bureau]

	Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks	Authority
,	New England coast	11					Wind and snow	Steamer grounded near Rose Island; street car and light service out of commission; high- ways blocked by fallen wires.	Times (New York).
,	Illinois	12-13			 		Snow and wind	Considerable losses to transportation companies; highways blocked by drifts; telephone lines down; icey condition of streets dangerous.	Official, U. S. Weather Bureau.
U	Whatcom County, Wash.	12-13				\$27,000	Sleet and wind	Telegraph, telephone, and transmission lines damaged.	$D_0$ .
	(western part of). Hudson Valley, N. Y Ohio		I	i			· -	Traffic impeded.  Flood conditions resulted. Damage not re- ported.	Do. Do.
1	Missouri (southeastern part).	18-24					Rain, sleet, and glaze.	Worst glaze storm in 20 years or more. Public utilities suffer severely; fruit, timber, and small houses damaged by ice; many auto-	D <sub>0</sub> .
	Tennessee (northwest	19-21			4		Heavy rains	accidents in various parts of the State. Children drowned while crossing swollen	Do.
	part). Indiana (middle and south-	20-23	 				Glaze	stream; no damage to property reported. Travel difficult; fruit and winter grains dam-	Do
4	ern parts). Illinois (southern part)						do	aged.  Area embraced about 20 counties; 98 per cent of damage due to falling limbs and trees; tele- phone and telegraph companies sustain heavy losses; much injury to commercial orchards.	Do.
•	Kentucky (north and	22-23					do	Extensive damage to wire systems	
	west). Oklahoma	22-24				218, 000	Severe sleet and	Wire systems badly damaged	Do.
	Texas (north and west)						glaze. Glazo	Considerable damage to overhead wires, power lines, and trees. Scores of minor accidents reported.	Dallas (Tex.) Morning News.
	Pittsburgh, Pa., and vicin-	23					Rain and glaze	Wires thickly coated; cars run with difficulty	Official, U.S. Weather Bu-
	Milwaukee and Mani- towee, Wis.	<b>29–3</b> 0				1,000	Wind	Several plate glass windows broken; some signs and outbuildings blown down.	reau. Do.
	Buffalo, N. Y.	30					Thunderstorm, wind, and hail.	One home damaged by lightning	Do.

## STORMS AND WEATHER WARNINGS

## WASHINGTON FORECAST DISTRICT

Few storm warnings were required during the month, and they were issued for only three storms. The first were southeast warnings displayed at 10 a.m. of the 4th from Delaware Breakwater to Boston, and at 9:30 p.m. on the coast of Maine, for a disturbance of marked intensity moving eastward with center over Ontario that morning. The highest wind velocity during the ensuing 24 hours was 48 miles an hour from the southeast at Eastport, Me.

On the morning of the 11th a disturbance was advancing northeastward with increasing intensity, with center about 200 miles off the New Jersey coast, and northeast storm warnings were ordered displayed from Block Island, R. I., to Eastport, Me. All stations in this area reported verifying velocities, the highest being 60 miles an hour from the northeast at Nantucket, Mass. On the 15th another disturbance was central in about the same location as that of the 11th, but the following area of high pressure was much stronger and accompanied by a cold wave. Consequently, northwest storm warnings were displayed from Cape Hatteras to Boston at 9 a. m., and northeast warnings north of Boston at 10:30 p. m. Verifying velocities occurred at practically all stations,

New York City reporting 60 and Cape Henry 48 miles an hour, both from the northwest.

The last storm warnings of the month were issued under unusual conditions at 9:30 p. m. of the 26th. At that time an area of abnormally high pressure (31.06 inches at Southampton, Ontario), accompanied by a cold wave, was pushing rapidly southward over the Atlantic States. Although there was no low pressure over the East Gulf or South Atlantic States, strong north and northeast winds were indicated for the South Atlantic coast because of the steep pressure gradient from north to south. Therefore, northeast storm warnings were displayed from the Virginia capes to Savannah, Ga. Cape Hatteras reported the highest velocity, 40 miles an hour from the north.

Small-craft warnings were issued for portions of the Atlantic coast on the 1st, 6th, 11th, 15th, and 26th, and warnings of northers in the Panama Canal Zone were issued on the 10th, 14th, and 27th.

Heavy-snow warnings were issued at 3:45 p. m. of the 11th for Rhode Island, eastern Massachusetts, and part of Maine and New Hampshire. The following morning Eastport, Me., reported 5, Boston 7, and Block Island, R. I., 11 inches of snow on the ground.

No cold-wave warnings were required during the first 13 days, and the only general warnings were those of the